



Job Loss Analysis

ID No:2000119

Status: closed

Original Date: 6/May/2010
Last Review Date: 30/Aug/2010

Organization:

SBU: Richmond Refinery
BU: Global Mfg Shared
Work Type: Technical Process Engineering
Title (Work Activity): Process Engineering Lab Testing and Results—Special Samples
Site/Region:

Personal Protective Equipment (PPE)	Selected	Comments
Proper PPE per your Refinery Guidelines	Y	
Additional Task Specific PPE		
Other		

Reviewers

Reviewers Name	Position	Date Approved
Michelle Johansen	Process Engineering Manager RI Refinery	30/Aug/2010

Development Team

Development Team Member Name	Primary Contact	Position
Michelle Johansen	Y	Process Engineering Manager
Adam Lovano		Process Engineering
Aaron Sims		Lead Process Engineer
Charles Odumah		Process Engineer
Chris Robinson		Process Engineer

Job Steps

No	Job Steps	Potential Hazard	Critical Actions
1	Determine the problem you are trying to solve and how the results of the laboratory sample analysis will be used.	1.Lost time and money if sample plan is not clear and will not help solve the problem.	1. Write a problem statement and what sample data will provide to solve the problem.

2	Determine what samples should be drawn, the frequency and the type of analysis needed	1. Lost time and money if a methodical, clear sampling plan is not followed or the analysis done is inadequate.	<p>1a. Mark up a Process Flow Diagram with the location of samples required and note analysis needed.</p> <p>1b. Prioritize which samples are critical for troubleshooting and which samples can be run later</p> <p>1c. Note which samples should be held as retains</p> <p>1d. Document what process conditions should be monitored at the time samples are taken.</p>
3	Discuss with the local refinery lab if analysis can be done or must be sent to ETC or to a 3 rd Party outside lab.	1. Lost time troubleshooting the problem if the sample request is not understood or not sent to right lab.	<p>1a. Discuss whether qualitative or quantitative sample results are needed.</p> <p>1b. Discuss recommended sample method.</p> <p>1c. Discuss reproducibility and repeatability of test method.</p> <p>1d. Discuss needed sample sizes and containers.</p> <p>1e. Discuss any special sample preparation and tagging needed.</p> <p>1f. Discuss timing for results.</p> <p>1g. Obtain cost estimate for samples.</p>
4.	Discuss with chemist or research the recommended sample method documentation (ASTM for many tests).	1. Lost time and money if testing done is not accurate.	<p>1a. Identify any test method interferences and their significance to the sample result.</p> <p>1b. Check with Chemist on validity of the suggested test.</p>
5	Review the sample plan with Lead Engineer, Senior Engineer, or BIN Leader for completeness.	2. Samples are taken that are not needed or samples are forgotten causing longer troubleshooting effort and increased plant LPO.	1a. Review sample plan and make any necessary changes.
6	Get approval to take the samples and get results.	1. Costs are not understood and may affect budget.	1. Follow refinery approval process to get a charge code for the special samples.

7	Request special samples be pulled and delivered to lab.	Lost time if samples are not in the right containers, not labeled properly, or not delivered to the lab.	1a. Identify who will pull the samples. 1b. Provide clear instructions for taking the samples based on lab feedback. Indicate any special equipment needed. 1c. Verify samples are delivered to the lab. 1d. Verify that samples are identified correctly and any hazardous material is clearly noted, i.e. H2S. 1f. Verify expected timing for results. 1g. Record any process date needed at time samples are taken. This is especially critical if outside readings are needed.
8	Review sample results and recommend process changes based on results.	1. LPO if sample results are not understood. 2. LPO if process moves are not timely.	1. Review results with the lab if necessary. 2. Send process engineering recommendation to make plant changes based on samples.
9	Save lab report or results for future use.	1. Lost time repeating special sampling if results are not saved for future review.	1. Save lab report or results in GDW/PMO/Process Engineering Plant Turnover/Plant files.
10	Discard sample retains.	1. Hazard due to samples left in car trunk, storage cabinet, etc.	1. Contact HES to determine if any special disposal procedures are needed and dispose of samples as appropriate.